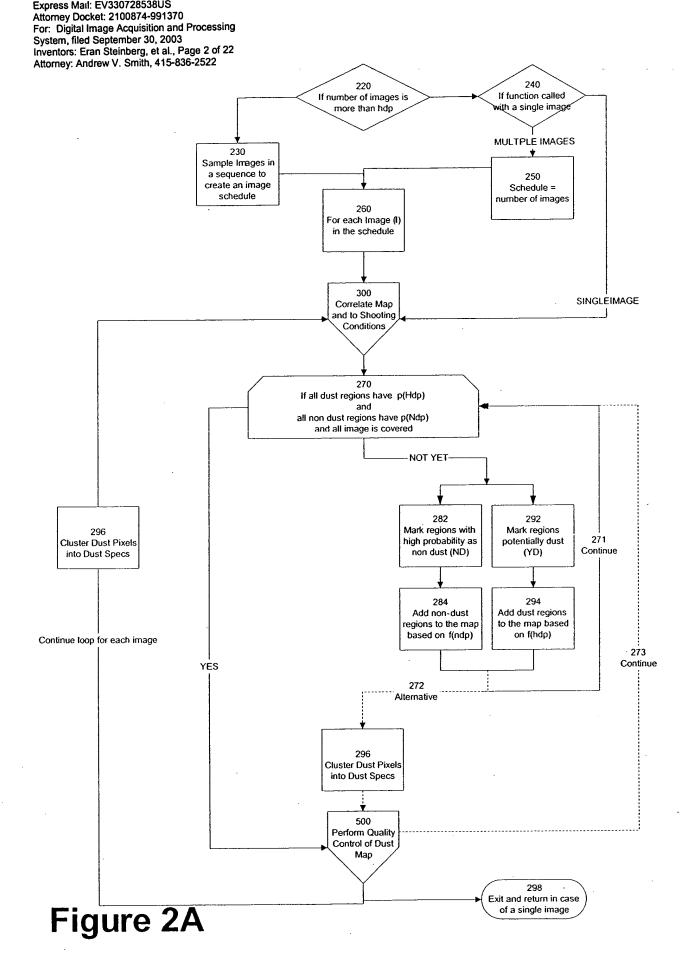
Express Mail. EV330728538US Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 1 of 22

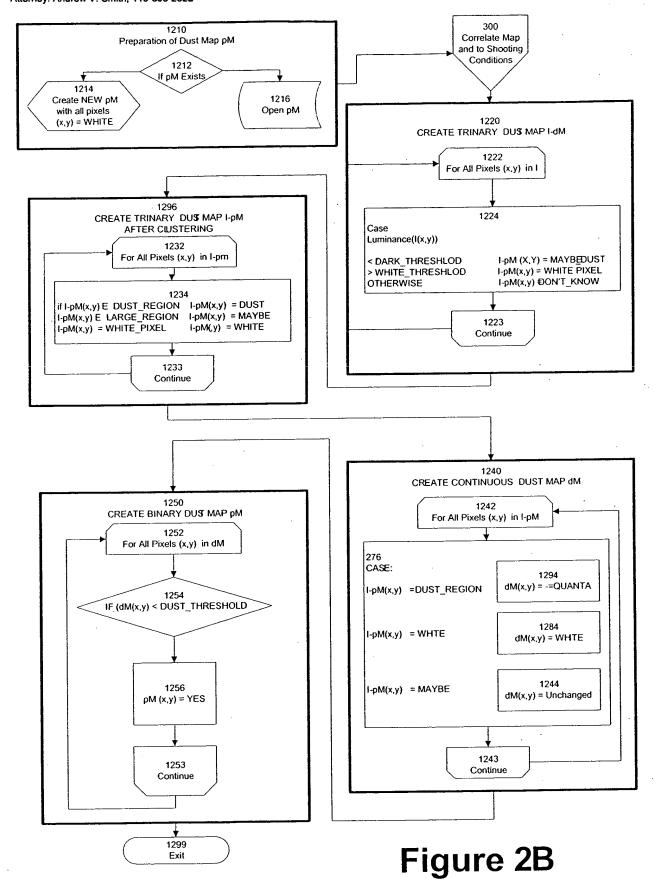
Attorney: Andrew V. Smith, 415-836-2522

100 MAINWORKFLOV 101 104 102 User Takes User Opens an image on the PC Open a collection on a User Opens a folder of Picture on the image on the PC digital printer Camera 120 110 CONTNUE Extract For each image in TONEXT Shooting the collection Parameters IMAGE 300 Correlate Map and 130 to Shooting 132 Open Stored NO DUST MAP EXISTS Conditions Dust map(s) Figure 1 Does Image 1200 correspond with any Open of the stored Dust Map? CONTINUE YES 154 160 Store imagename/ 152 For each dust NOT YET image data in a region in the dust 150 temporary location map YES Is the confidence level high enough on the dust map and the dust regions? 162 156 155 For each dust Detect and Are there images that were not NEXT region in the dust corrected yet? DÚST map REGON 400 Detect and DONEWITH Remove Dust TEMP STORED IMAGES CONTNUE WITH Perforr Quality **NEW IMAGES** Check on dust spec 170 CONTNUE

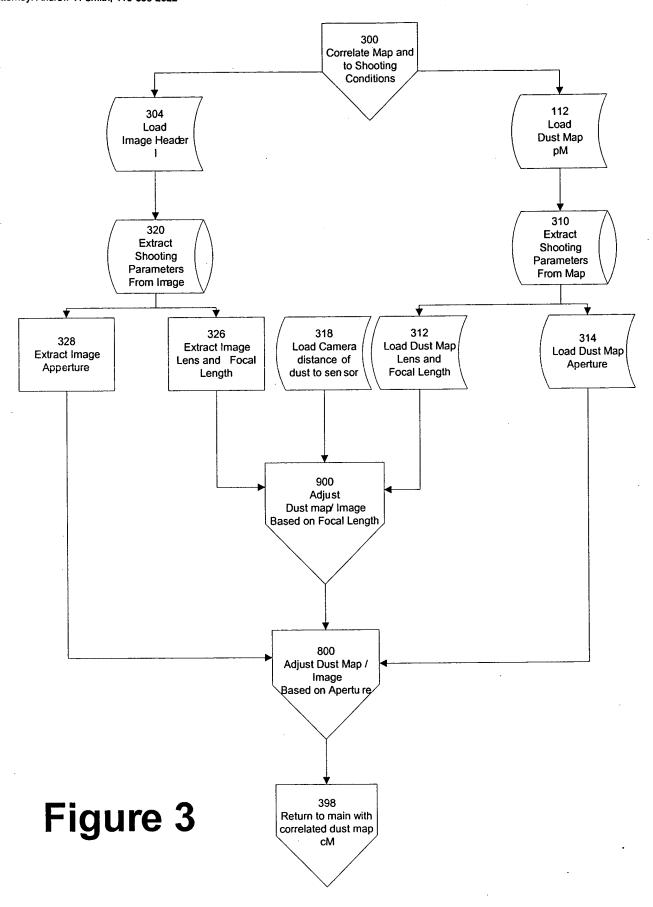
TO NEXT



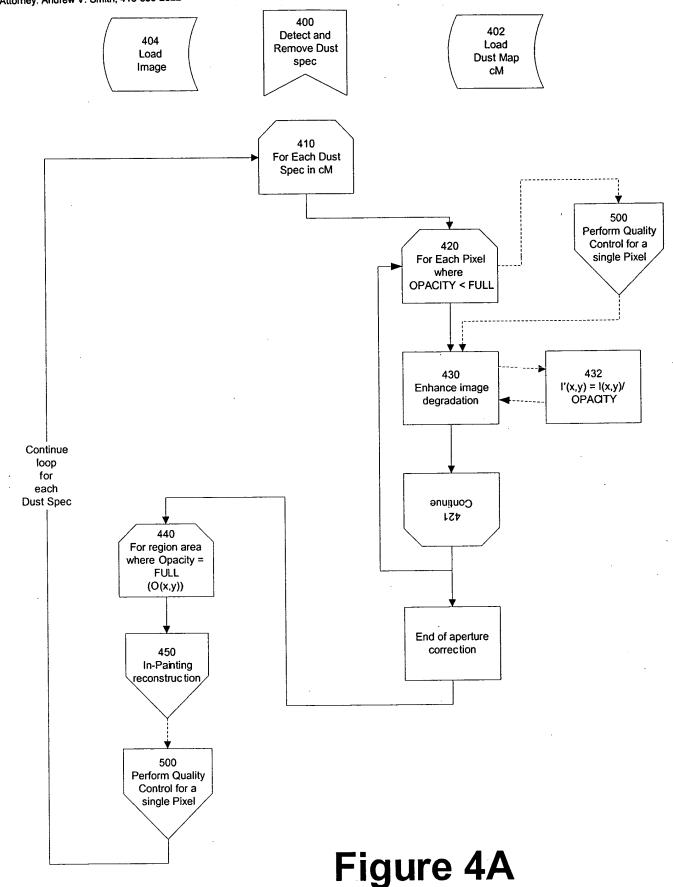
Express Mail: EV330728538US Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 3 of 22 Attorney: Andrew V. Smith, 415-836-2522



Express Mail. EV330728538US
Attorney Docket: 2100874-991370
For: Digital Image Acquisition and Processing
System, filed September 30, 2003
Inventors: Eran Steinberg, et al., Page 4 of 22
Attorney: Andrew V. Smith, 415-836-2522



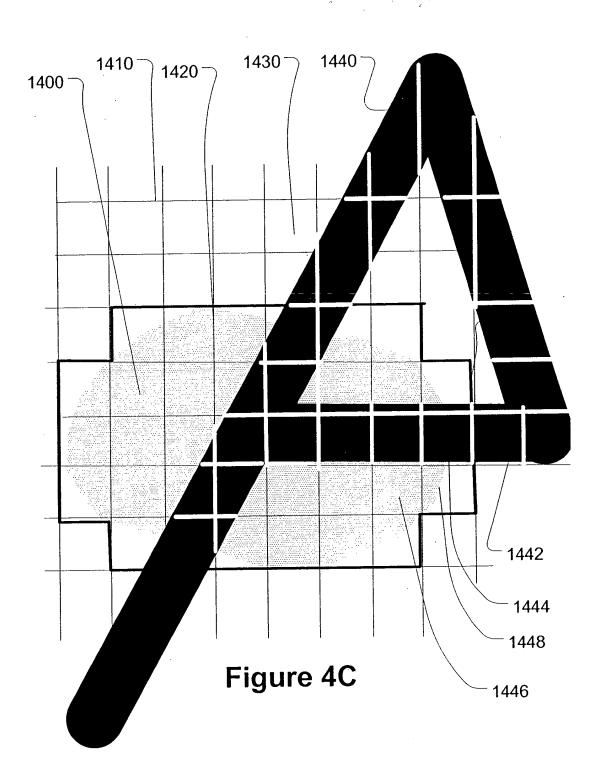
Express Mail: EV330728538US
Attorney Docket: 2100874-991370
For: Digital Image Acquisition and Processing
System, filed September 30, 2003
Inventors: Eran Steinberg, et al., Page 5 of 22
Attorney: Andrew V. Smith, 415-836-2522



Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 6 of 22 Attorney: Andrew V. Smith, 415-836-2522 450 In-Painting reconstruction 451 Input: region area where Opacity = FULL (O(x,y))460 For each pixel (I,j) in the periphery of O(x,y)480 For each pixel (I,j) in O(x,y) Define the Gradient for (i,j) 482 Apply a new value based on its surrounding pixels 470 For each pixel (k,l) in the Inner boundaries of O(x,y) 489 Continue 472 Find the pixel (m,n) surrounding (k,l) with the smallest Gradient 474 Apply I(k,l) =L2||(m,n),(k,l)||*Grad(l(k,l))Remove (k,l) from O(x,y) Figure 4B 479 Continue

Express Mail: EV330728538US

Express Mail: EV330728538US
Attorney Docket: 2100874-991370
For: Digital Image Acquisition and Processing
System, filed September 30, 2003
Inventors: Eran Steinberg, et al., Page 7 of 22
Attorney: Andrew V. Smith, 415-836-2522



Express Mail. EV330/28538US
Attorney Docket: 2100874-991370
For: Digital Image Acquisition and Processing
System, filed September 30, 2003
Inventors: Eran Steinberg, et al., Page 8 of 22
Attorney: Andrew V. Smith, 415-836-2522

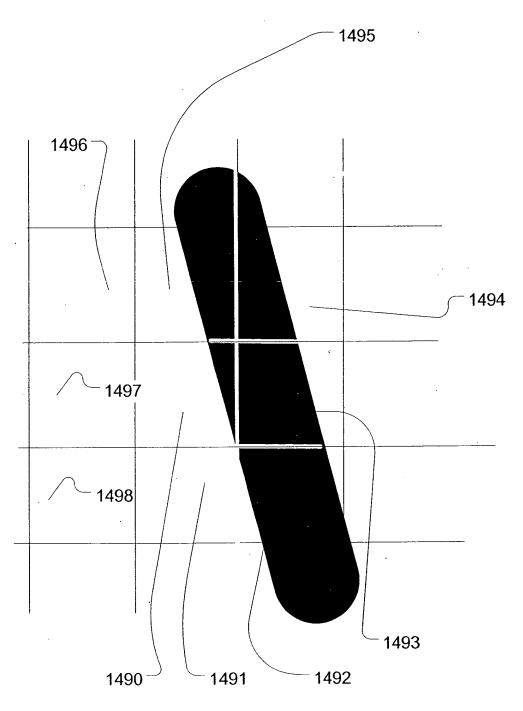


Figure 4D

Express Mail. EV33072853805
Attorney Docket: 2100874-991370
For: Digital Image Acquisition and Processing System, filed September 30, 2003
Inventors: Eran Steinberg, et al., Page 9 of 22
Attorney: Andrew V. Smith, 415-836-2522

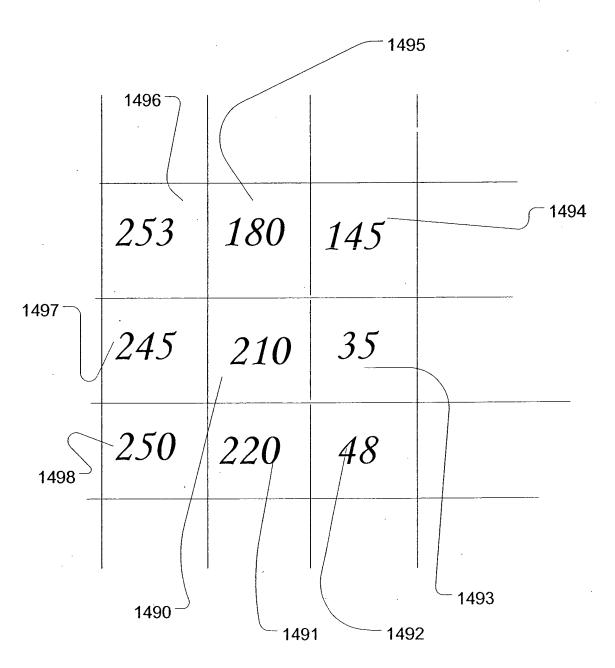


Figure 4E

Express Mail: EV330728538US Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 10 of 22 Attorney: Andrew V. Smith, 415-836-2522

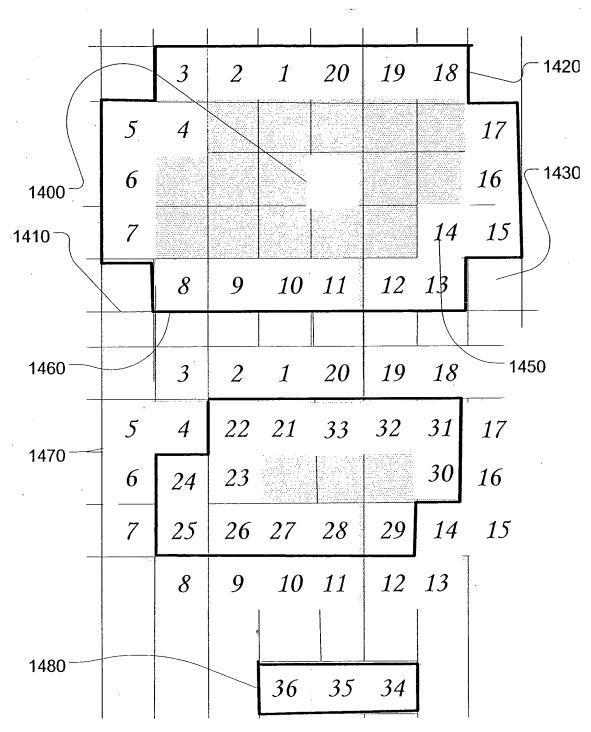


Figure 4F

Express Mail. EV33072633807 Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 11 of 22 Attorney: Andrew V. Smith, 415-836-2522

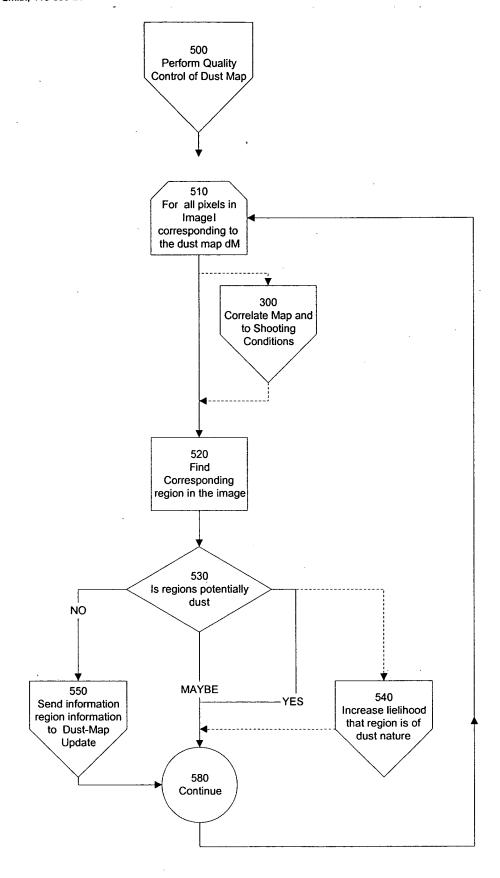
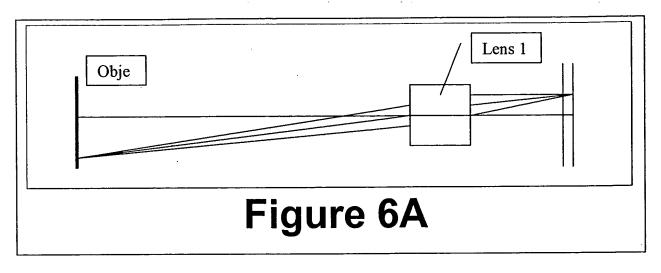
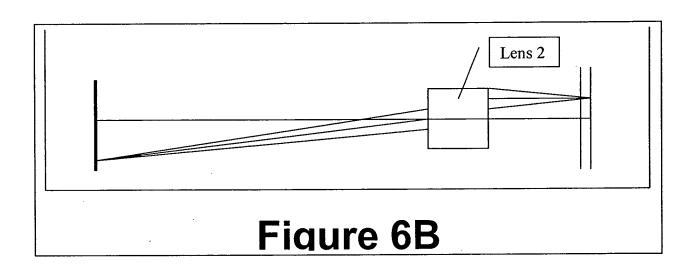
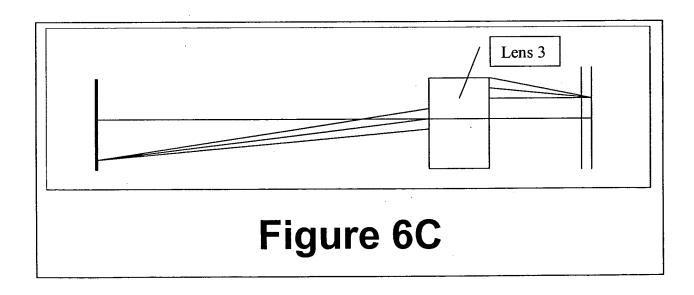


Figure 5

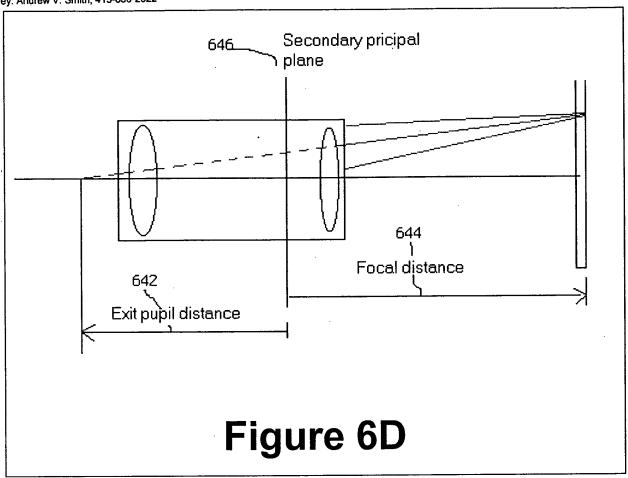
Attorney Docket: 2100874-991370
For: Digital Image Acquisition and Processing
System, filed September 30, 2003
Inventors: Eran Steinberg, et al., Page 12 of 22
Attorney: Andrew V. Smith, 415-836-2522

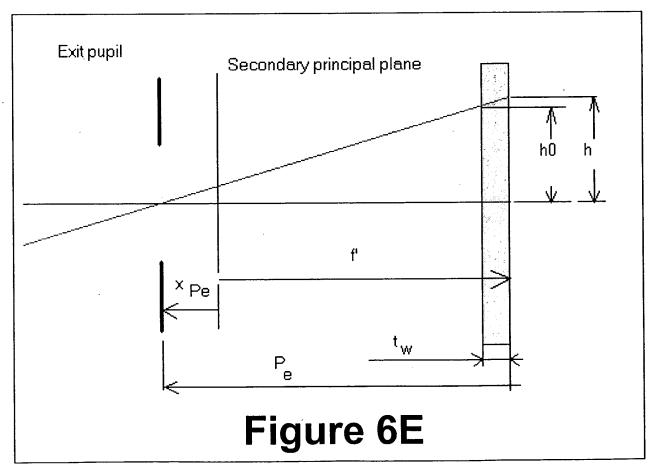




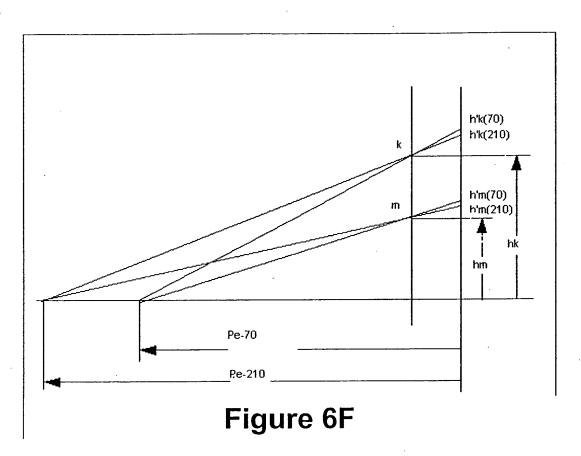


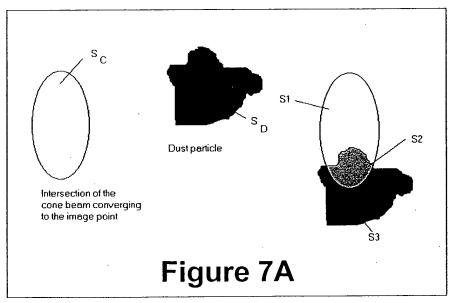
Express Mail: EV330728538US Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 13 of 22 Attorney: Andrew V. Smith, 415-836-2522



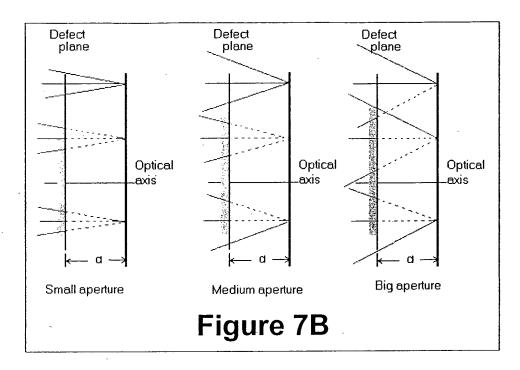


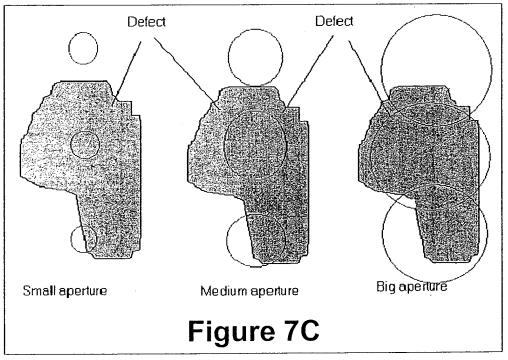
Express Mail: EV330728538US Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 14 of 22 Attorney: Andrew V. Smith, 415-836-2522





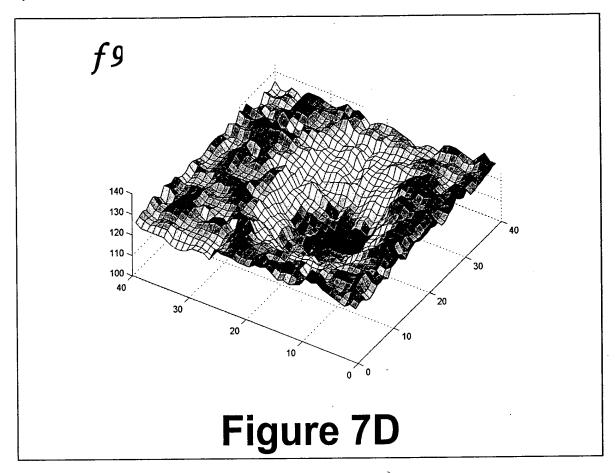
Express Mail. EV33072853805 Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 15 of 22 Attorney: Andrew V. Smith, 415-836-2522

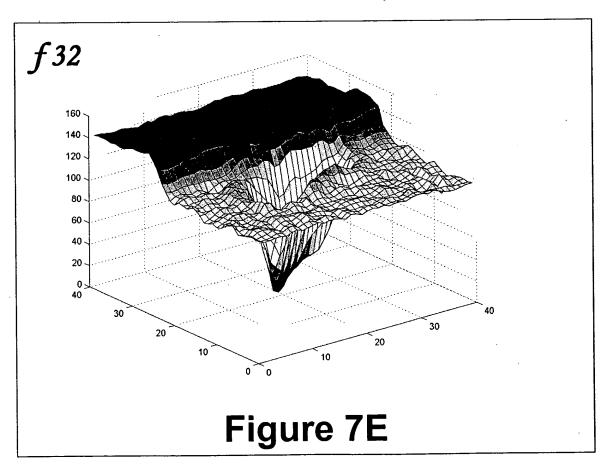




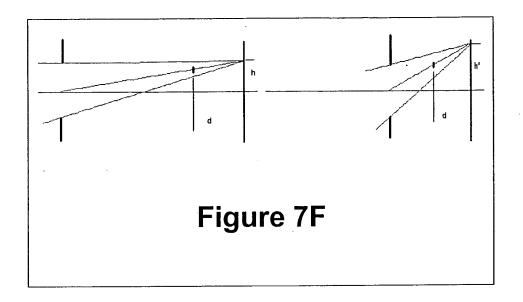
Express Mail: EV330728538US Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing

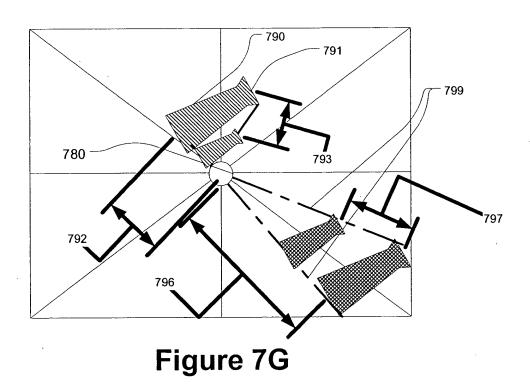
System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 16 of 22 Attorney: Andrew V. Smith, 415-836-2522





Express Mail: EV330728538US Attomey Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 17 of 22 Attorney: Andrew V. Smith, 415-836-2522





Express Mail: EV330728538US
Attorney Docket: 2100874-991370
For: Digital Image Acquisition and Processing
System, filed September 30, 2003
Inventors: Eran Steinberg, et al., Page 18 of 22
Attorney: Andrew V. Smith, 415-836-2522

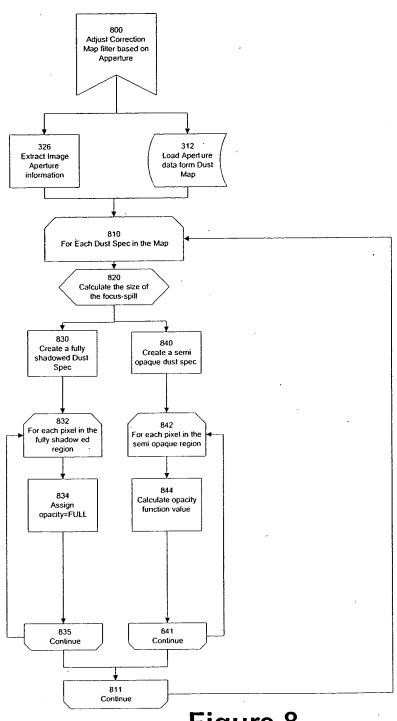


Figure 8

Express Mail: EV330728538US Attorney Docket: 2100874-991370

For: Digital Image Acquisition and Processing System, filed September 30, 2003

Inventors: Eran Steinberg, et al., Page 19 of 22 Attorney: Andrew V. Smith, 415-836-2522

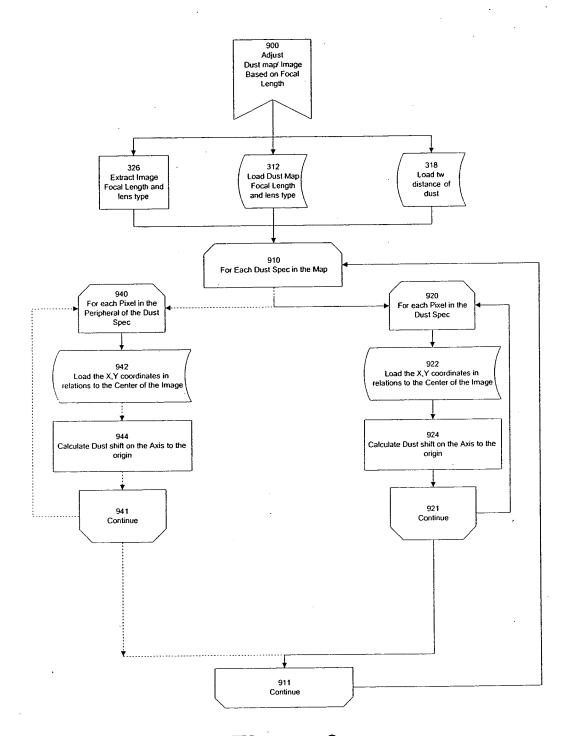


Figure 9

Express Mail: EV330728538US Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 20 of 22 Attorney: Andrew V. Smith, 415-836-2522

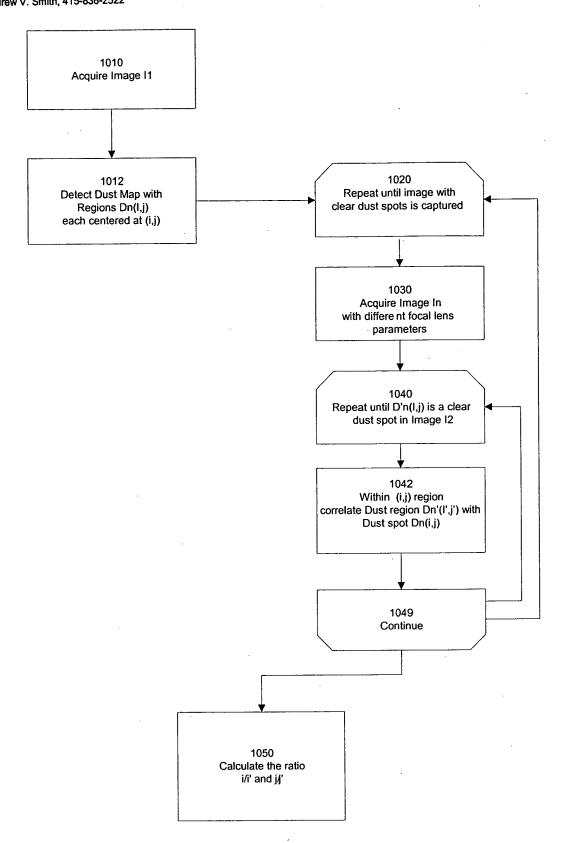
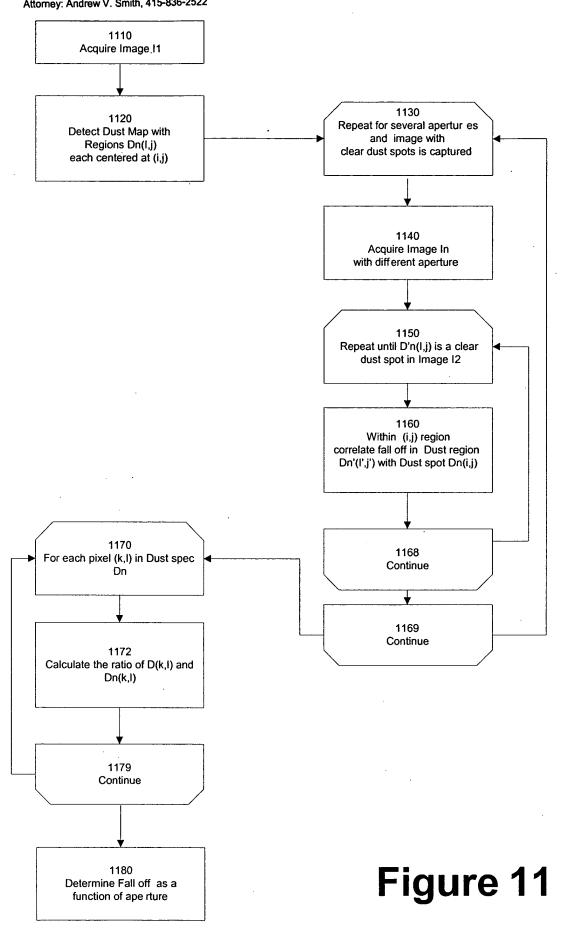


Figure 10

Express Mail. EV33072633607 Attorney Docket: 2100874-991370 For: Digital Image Acquisition and Processing System, filed September 30, 2003 Inventors: Eran Steinberg, et al., Page 21 of 22 Attorney: Andrew V. Smith, 415-836-2522



Express Mail. EV330728538US
Attorney Docket: 2100874-991370
For: Digital Image Acquisition and Processing
System, filed September 30, 2003
Inventors: Eran Steinberg, et al., Page 22 of 22
Attorney: Andrew V. Smith, 415-836-2522

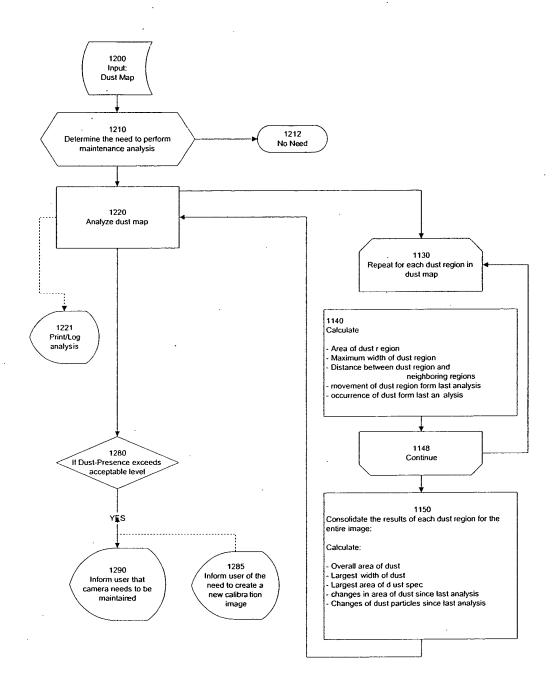


Figure 12